

Please cancel claims 2 to 4, 9, 10, 14, 15, 17 to 21, 28 to 32, 34, and 36 to 38 without prejudice.

Please amend the following claims:

a² --1. (amended) A composition comprising: [A] an isolated, purified, or recombinant polynucleotide comprising a nucleotide sequence selected from the group consisting of the nucleotide sequences [a contiguous span of at least 12 nucleotides] of SEQ ID No 1, 2, 3 and 4, or the complements thereof.

a³ 5. (amended) A composition comprising: [A] an isolated, purified, or recombinant polynucleotide consisting essentially of a contiguous span of 12 [8 to 50] nucleotides of any one of SEQ ID Nos 1 and 2 or the complement thereof, wherein said span includes a TBC-1-related biallelic marker in said sequence.

6. (amended) The [A] polynucleotide according to claim 5, wherein said TBC-1-related biallelic marker is selected from the group consisting of [A1 to A19] the biallelic markers in positions 9494 of SEQ ID No 1, and 1443, 5247, 6223, 14723, 19186, 18997, 19891, 29617, 42519, 69324, 69181, 69146, 76458, 78595, 82159, 84522, 84810, and 89967 of SEQ ID No 2.

7. (amended) The [A] polynucleotide according to [any one of claims 5 or 6] claim 5, wherein said contiguous span is 18 to 35 nucleotides in length and said biallelic marker is within 4 nucleotides of the center of said polynucleotide.

8. (amended) The [A] polynucleotide according to claim 7, wherein said polynucleotide consists of said contiguous span and said contiguous span is 25 nucleotides in length and said biallelic marker is at the center of said polynucleotide.

a⁴ 11. (amended) The [A] polynucleotide according to [any one of claims 5 or 6] claim 5, wherein the 3' end of said contiguous span is located at the 3' end of said polynucleotide and said biallelic marker is present at the 3' end of said polynucleotide.

12. (amended) A composition comprising: [A] an isolated, purified, or recombinant polynucleotide consisting essentially of a contiguous span of 8 to 50 nucleotides of any one of SEQ ID Nos 1 and 2 or the complement thereof, wherein the 3' end of said contiguous span is

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located at the 3' end of said polynucleotide, and wherein the 3' end of said polynucleotide is located within 20 nucleotides upstream of a *TBC-1*-related biallelic marker in said sequence.

13. (amended) The [A] polynucleotide according to claim 12, wherein the 3' end of said polynucleotide is located 1 nucleotide upstream of said *TBC-1*-related biallelic marker in said sequence.

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16. (amended) A composition comprising: [A] an isolated, purified, or recombinant polynucleotide which encodes a polypeptide comprising a contiguous span of at least 6 amino acids of SEQ ID No 5.

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22. (amended) The [A] polynucleotide according to [any one of claims 1 to 21] claim 5 attached to a solid support.

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25. (amended) The [A] polynucleotide according to [any one of claims 1 to 21] claim 5 further comprising a label.

26. (amended) A composition comprising: a recombinant vector comprising a polynucleotide according to [any one of claims 1 to 4 and 16] claim 5.

27. (amended) A composition comprising: a host cell comprising a recombinant vector according to claim 26.

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33. (amended) A method according to claim [29] 44, further comprising amplifying a portion of said sequence comprising the biallelic marker prior to said determining step.

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35. (amended) A method according to claim [29] 43, wherein said determining is performed by a hybridization assay, sequencing assay, microsequencing assay or enzyme-based mismatch detection assay.

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37. (amended) A method according to [any one of claims 29 to 38] claim 44, wherein said *TBC-1*-related biallelic marker is selected from the group consisting of [A1 to A9 and the complements thereof] the biallelic markers in positions 9494 of the SEQ ID No 1, and 1443.

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5247, 6223, 14723, 19186, 18997, 19891, 29617, 42519, 69324, 69181, 69146, 76458,
78595, 82159, 84522, 84810, and 89967 of the SEQ ID No 2.

Please add the following claims:

a10 38 40. (new) A composition comprising: an isolated, purified, or recombinant polypeptide comprising a continuous span of at least 8 amino acids of SEQ ID No 5.

39 41. (new) A composition comprising: an isolated or purified antibody composition capable of selectively binding to an epitope-containing fragment of a polypeptide according to claim 35.

40 42. (new) A method of making a purified or isolated TBC-1 polypeptide encoded by a polynucleotide of claim 1; wherein said method comprises the steps of:

- (i) obtaining a cell capable of expressing said polypeptide;
- (ii) growing said cell under conditions suitable to produce said polypeptide; and
- (iii) isolating said polypeptide.

41 43. (new) A method of genotyping comprising the steps of:

- (a) obtaining a nucleic acid sample from an individual; and
- (b) determining the identity of a polymorphic base at a TBC-1-related biallelic marker or the complement thereof in said nucleic acid sample, wherein the identity of the polymorphic base determines the genotype of the individual at said TBC-1-related biallelic marker and, wherein said TBC-1-related biallelic marker is positioned in SEQ ID NO: 1 or SEQ ID NO:2.--

REMARKS

Amendments to the claims:

Claims 2 to 4, 9, 10, 14, 15, 17 to 21, 28 to 32, 34, and 36 to 38 have been canceled without prejudice. New Claims 40 to 43 have been added. Support for the new Claims is found throughout the specification